UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/469,307	12/22/1999	JOONG-KYU CHOI	P-056	4821

34610 7590 04/12/2005	EXAMINER
FLESHNER & KIM, LLP	AMSBURY, WAYNE P

ART UNIT	PAPER NUMBER
2161	

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CHANTILLY, VA 20153

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 March 2005*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 December 1999* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

CLAIMS 1-25 ARE PENDING

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

3. Upon further consideration of the question of synchronization raised in the previous action, it is considered that there are issues of enablement that should be addressed. The examiner apologizes for not addressing them previously.

Claim interpretation for the purpose of either allowability or enablement is necessarily made in light of the Specification as understood by the examiner. For the sake of compact prosecution the Specification is discussed below.

The synchronization of two databases can be effected by transmission of the differences from one to another, generally changes since an earlier synchronization. However, suppose that databases A, B, and C are to be synchronized, where B and C undergo independent and distinct local changes. In that case, transmission of the changes in B to A and the changes in C to A leaves no pair synchronized. Transmission in the other direction(s) is required.

In the terminology of the Specification, there are two local memories at each of a plurality of network elements (NE), and these communicate data to an element management system (EMS). [See FIG 2.] To the extent that the examiner can determine, the two local memories of an NE are a *common memory (CM)* that contains locally current data and perhaps (change) status, and a *sync-related memory (RM)* that contains data and status from a previous synchronization. These are apparently the NEi_CM and the NEi_RM of FIG 2 for i=1...n. The EMS contains corresponding EMS_RMi for i = 1...n and a single EMS_CM. This characterization is based on statements such as the one at page 3, lines 3-4: *each NE includes a common memory in which DB information and alarm state information are **rearranged**; and a sync-related memory of the same pattern as the common memory for maintaining DB identity with the EMS [emphasis added]*. The term *rearranged* is taken here for the sake of compact prosecution to indicate DB changes, since there is no other clear reference to changes that might require synchronization.

The operation of the system as described in the Specification includes a loop [FIG 4; page 5 lines 17-22] that transmits changed data from each NEi_CM to both the corresponding EMS_RMi and to NEi_RM, more or less concurrently. One can infer that the intent is to transmit NEi_RM = NEi_CM at this stage to EMS_RMi. At another stage of the overall process [page 5 line 23 to page 6 line 4], the resulting changes {EMS_RMi} are copied into EMS_CM. At that point, EMS_CM contains all of the changes at NEi for i = 1...n since the last synchronization cycle, but no other component of the system does.

As noted above, these actions do not synchronize any pair of databases in the system, as there are at least three elements NEi. This contradicts the clear intent of the Title, Abstract, much of the Specification, and the preamble of the claims.

There are also serious difficulties in interpretation and enablement due to the failure to use appropriate subscripts and distinguish singularities and pluralities, and other elements of the disclosure.

In particular, the EMS is taken to be the system as depicted in FIG 2, involving multiple NEi_RM and NEi_CM and EMS_RMi components by its nature. A component such as NE_CM with no subscript in a statement can be difficult or impossible for one of skill in the art to interpret in such as way as to make and use the invention. This problem is addressed in the rejections below.

The examiner respectfully suggests that a C.I.P. could be used in order to clarify the Specification and enable the claims.

4. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms that are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are:

The failure to use subscripts appropriately, particularly in conjunction with locutions such as *"the RM of the EMS in accordance with the corresponding header"*, where the header as depicted in FIG 3 shows no elements that distinguish both

particular NE components and block components of the NE_DB. Furthermore, a header
bit as shown in FIG 3 and the corresponding discussion cannot distinguish more than
two items, being either 0 or 1 in value. Similarly, the data **bit** can contain only a 0 or 1,
which is not a block of data, as it is commonly understood in the art.

The use of *synchronization* when no synchronization is completed, as discussed
above, contrary to such passages as *thereby obtaining a database synchronization* at
page 6 line 11 and elsewhere.

5. **Claims 18-25 are rejected under 35 U.S.C. 112, first paragraph**, as failing to
comply with the enablement requirement. The claim(s) contains subject matter that was
not described in the specification in such a way as to enable one skilled in the art to
which it pertains, or with which it is most nearly connected, to make and/or use the
invention.

The preambles of these claims state that they claim a method of the
synchronization of an EMS. As noted above, the Disclosure fails to support
synchronization for such a system.

6. **Claims 1-25 are rejected under 35 U.S.C. 112, first paragraph**, as failing to
comply with the written description requirement. The claim(s) contains subject matter
that was not described in the specification in such a way as to reasonably convey to one
skilled in the relevant art that the inventor(s), at the time the application was filed, had
possession of the claimed invention.

The failure to describe synchronization, as it is understood in the art, or to clearly

set forth the details of the process called synchronization in the Disclosure is discussed

in detail above.

7. **Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph**, as failing

to set forth the subject matter which applicant(s) regard as their invention. Evidence

that claims 1-25 fail(s) to correspond in scope with that which applicant(s) regard as the

invention can be found in the Disclosure of 12/29/1999.

In that paper, applicant has stated repeatedly that the invention is regarded as

database synchronization, and in particular, the Field of the Invention and the object of

the invention in the SUMMARY is stated to be: *a method for database synchronization*

between an EMS and NEs (Network Elements). This statement indicates that the

invention is different from what is defined in the claim(s) because none of the claims

synchronize databases, as discussed in detail above.

8. Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

None of these claims are clearly related to database synchronization as it is

understood in the art, and thus it is not clear how they relate to the stated intent of the

preambles of the claims.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Amsbury whose telephone number is 571-272-4015. The examiner can normally be reached on M-F 6-18:30 FIRST WEEK.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WPA

WAYNE AMSBURY
PRIMARY PATENT EXAMINER